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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE Philip David Steiner 026-0013 6289 12/11/2001 10/015,030 EXAMINER 22120 08/23/2005 TSE, YOUNG TOI ZAGORIN O'BRIEN GRAHAM LLP PAPER NUMBER

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2637 **DATE MAILED: 08/23/2005**

ART UNIT

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/015,030	STEINER ET AL.
	Examiner	Art Unit
	YOUNG T. TSE	2637
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on 11 December 2001.		
2a)☐ This action is FINAL . 2b)☒ This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
 4) Claim(s) 1-43 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 2,4-8,12,13,25,26,28 and 30-42 is/are rejected. 7) Claim(s) 1,3,9-11,14-24,27 and 43 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 		
Application Papers		
 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 11 December 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 		
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 		
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 041502,071403.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	

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DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first and second DAC converters as recited in claims 12 and 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Specification

2. The disclosure is objected to because of the following informalities: page 4 (line 3) and page 17 (line 6), "1200" should be "1201" as shown in Figure 12; page 13, line 19, "the and" appears to read "and the". Appropriate correction is required.

Claim Objections

3. Claims 1-43 are objected to because of the following informalities:

In claim 1, line 6, "a loss-of-signal" should be "the loss-of-signal" for clarity since the same phrase has recited in the preamble of the claim. Also see claim 22, line 3.

In line 1 of claims 6-8, "the threshold count" should be "the threshold count level".

In claim 8, line 2, "is asserted" should be "is generated".

In claim 12, line 1, "first portion" should be "a first portion" and line 2, "a second portion" should be "a second portion of the digital signal is supplied".

In claim 15, line 2, "the decimated output" should be "a decimated output".

In claim 17, line 2, "an output" should be "the output".

In line 2 of claims 19 and 20 and lines 2-3 of claims 21 and 22, "a loss of signal" should be "the loss-of-signal". Also see claim 28 (line 6) and claim 42 (line 5).

In claim 22, line 2, "for four phases of a clock before a decision" should be "four phases of a clock before the decision".

In line 1 of claims 25 and 26, "further comprising" should be "as recited in claim". In claim 28, line 4, "a signal" should be "a signal strength".

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In claim 29, lines 4-5 and 7-8, "threshold signal strength level" should be "signal strength threshold level" in consistent with other claims; and line 6, "a LOS" should be "the LOS". Also see claim 43.

In claim 30, line 5, "signal strength" should be "the signal strength" and line 6, "the input data" should be "the sampled input data".

In line 2 of claims 33 and 34, "count" should be "count value".

In claim 35, lines 4 and 5, the input signal" should be "the sampled input signal".

In claim 36, line 4, the word "and" should be deleted.

In claim 38, lines 3 and 4, the word "circuit" should be deleted since the transition-to-one converter does not use the word "circuit" and line 6, "transition to one" should be "transition-to-one".

In claim 42, "a signal threshold level" should be "a signal strength threshold level".

The dependent claims 2-3, 5, 9-11, 13-14, 18, 23-24, 27, 31-32, 37, and 39-41 are directly or indirectly depended upon the independent claims 1 and 30.

Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claims 2, 4-8, 12-13, 23, 25-26, 28 and 30-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2 (line 2), claim 4 (lines 1-2), claims 12-13 (lines 1-2), claim 23 (line 2), claim 25 (lines 1-3, both occurrences), claim 26 (lines 1-2, both occurrences), claim 28 (line 3), claim 36 (lines 2 and 4-5) and claim 39 (line 2), the phrases "the sampling rate", "wherein asserting the loss-of-signal indication", "the digital signal", "the integrated circuit", "the signal strength threshold", "the input data stream", "the offset signal" and "the register circuit" all lack antecedent basis.

The preamble of claim 30 recites an integrated circuit for generating a loss-of-signal indication, however, the body of the claim fails to recite the performance of the generation of the loss-to-signal indication.

Further, claim 30 recites "a counter circuit coupled to count according to an output of the sample circuit", however, it is unclear what is the output of the sample circuit since the sample circuit samples the input data and stores a first value and a second value.

In claim 42, the Applicants are requested to clarify the difference between "a signal strength threshold level" and "a threshold level".

Claims 5-8 depend upon claim 4.

Claims 31-35, 37-38 and 40-41 depend upon claim 30.

Allowable Subject Matter

6. Claims 1, 3, 9-11, 14-24, 27, 29 and 43 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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7. Claims 2, 4-8, 12-13, 25-26, 28 and 30-42 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to show or suggest a method or apparatus for determining existence of a loss-of-signal (LOS) condition for an input data stream by comparing signal strength of a plurality of a plurality of data bits of the input data stream to a signal strength threshold level to generate a signal strength indication and determining a count value of the signal strength indication prior the generation of the LOS indication based on the count value.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Steiner et al. (U.S. Patents 6,489,803 and 6,799,131) is one or two of the common inventors of the instant application which discloses the similar invention of the present invention.

Souissi et al. (U.S. Patent No. 5,878,352) discloses a system comprising a comparator for comparing signal strengths of a first identification signal and a second identification signal to provide an indication or strength indication signal as path losses.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday-Thursday and alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The Central FAX Number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OUNG T. TSE
Primary Examiner
Art Unit 2637